

Appendix B

Data Quality Assurance/Quality Assurance Review

**Shaw Environmental, Inc. QA/QC Review
Groundwater – First Semiannual (1Q 2008) Compliance Groundwater Monitoring Event
Leichner Brothers Recycling and Disposal Facility
CAS – Kelso, Washington, Report Number K0802413**

Samples: LB-031908-2 (LB-5D), LB-031908-3 (LB-5D Duplicate), LB-031908-1 (LB-5S), LB-031908-5 (LB-27D), LB-032008-4 (LB-27I), LB-032008-6 (LB-27I Duplicate) and Trip Blank.

Sample Date: 03/19/2008

Laboratory Sample Received Date: 03/19/2008

Laboratory Data Received Date: 04/14/2008

QA/QC Review Date: 04/21/2008 (JMJ)

Laboratory Sample Receipt Information: Samples received in good condition at a temperature of 4.7 °C.

VOCs

Surrogates	All sample surrogate % recoveries within QC limits.
Trip Blank	All ND.
Method Blank	All ND, surrogate % recoveries within control limits.
LCS	All % recoveries within QC limits, and all surrogate % recoveries within QC limits.
Matrix Spike	All % recoveries within QC limits.
MSD	All RPDs within control limits.

The primary evaluation criterion was exceeded for methylene chloride and bromoform in ICAL ID 7189. Additional details can be found in the case narrative.

Dissolved Metals

Method Blank	All ND.
LCS	All % recoveries within QC limits.
Duplicates	All RPDs within QC limits.
Matrix Spikes	All % recoveries within QC limits.

General Chemistry

Method blanks	All ND.
LCS	All % recoveries within QC limits.
Duplicates	All RPDs within QC limits.
Matrix Spikes	All % recoveries within QC limits.

Hold Times

All analytical hold times were met.

Reporting Limits

All established reporting limits were met.

Field QA/QC

Trip Blanks

A laboratory supplied trip blank was carried into the field with all the samples and returned to the laboratory for 8260 analysis. All analytes were reported as non-detect.

Data Validation

Upon final review of lab report #K0802413, Shaw Environmental, Inc. finds the data to be valid for its intended use (4/21/08 JMJ).

Notes:

QA – Quality Assurance

QC – Quality Control

RPD – Relative Percent Difference

MS – Matrix Spike

JMJ – Jeremy Matthew Jones

°C – Degrees Celsius

VOC – Volatile Organic Compound

LCS – Laboratory Control Sample

MSD – Matrix Spike Duplicate

**Shaw Environmental, Inc. QA/QC Review
Groundwater – First Semiannual (1Q 2008) Compliance Groundwater Monitoring Event
Leichner Brothers Recycling and Disposal Facility
CAS – Kelso, Washington, Report Number K0802543**

Samples: LB-032408-14 (LB-1S), LB-032408-15 (LB-1D), LB-032408-16 (LB-20S), LB-032408-17 (LB-3D), LB-032408-18 (LB-3S), LB-032408-19 (LB-4D), LB-032408-20 (LB-4S(R)), LB-032408-22 (LB-10DR), LB-032408-21 (LB-10SR), LB-032408-23 (Field Blank), and Trip Blank.

Sample Date: 03/24/2008

Laboratory Sample Received Date: 03/25/2008

Laboratory Data Received Date: 04/16/2008

QA/QC Review Date: 04/25/2008 (JMJ)

Laboratory Sample Receipt Information: Samples received in good condition at a temperature of 5.7 °C.

VOCs

Surrogates	All sample surrogate % recoveries within QC limits.
Trip Blank	All ND.
Method Blank	All ND, surrogate % recoveries within control limits.
LCS	All % recoveries within QC limits, and all surrogate % recoveries within QC limits.
Matrix Spike	All % recoveries within QC limits.
MSD	All RPDs within control limits.

The primary evaluation criterion was exceeded for methylene chloride and bromoform in ICAL ID 7189. Additional details can be found in the case narrative.

Dissolved Metals

Method Blank	All ND.
LCS	All % recoveries within QC limits.
Duplicates	All RPDs within QC limits.
Matrix Spikes	All % recoveries within QC limits.

General Chemistry

Method Blanks	All ND.
LCS	All % recoveries within QC limits.
Duplicates	All RPDs within QC limits.
Matrix Spikes	All % recoveries within QC limits.

Hold Times

All analytical hold times were met.

Reporting Limits

All established reporting limits were met.

Field QA/QC

Trip Blanks

A laboratory supplied trip blank was carried into the field with all the samples and returned to the laboratory for 8260 analysis. All analytes were reported as non-detect.

Field Blanks

A Field Blank (LB-032408-23) was collected on 3/24/08. All analytes were reported as non-detect except chloride, nitrate as nitrogen, and total dissolved solids.

Data Validation

Upon final review of lab report #K0802543, Shaw Environmental, Inc. finds the data to be valid for its intended use (4/25/08 JMJ).

Notes:

QA – Quality Assurance

QC – Quality Control

RPD – Relative Percent Difference

MS – Matrix Spike

JMJ – Jeremy Matthew Jones

°C – Degrees Celsius

VOC – Volatile Organic Compound

LCS – Laboratory Control Sample

MSD – Matrix Spike Duplicate

**Shaw Environmental, Inc. QA/QC Review
Groundwater – First Semiannual (1Q 2008) Compliance Groundwater Re-Sampling Event
Leichner Brothers Recycling and Disposal Facility
CAS – Kelso, Washington, Report Number K0803705**

Samples: MW10SR-043008 (LB-10SR).

Sample Date: 04/30/2008

Laboratory Sample Received Date: 04/30/2008

Laboratory Data Received Date: 05/14/2008

QA/QC Review Date: 06/02/2008 (JMJ)

Laboratory Sample Receipt Information: Samples received in good condition at a temperature of 0.1°C.

VOCs

Surrogates	All sample surrogate % recoveries within QC limits.
Method Blank	All ND, surrogate % recoveries within control limits.
LCS	All % recoveries within QC limits, and all surrogate % recoveries within QC limits.
Matrix Spike	All % recoveries within QC limits.
MSD	All RPDs within control limits.

Hold Times

All analytical hold times were met.

Reporting Limits

All established reporting limits were met.

Field QA/QC

None associated with these samples.

Data Validation

Upon final review of lab report #K0803705, Shaw Environmental, Inc. finds the data to be valid for its intended use (6/02/08 JMJ).

Notes:

QA – Quality Assurance
QC – Quality Control
RPD – Relative Percent Difference
MS – Matrix Spike
JMJ – Jeremy Matthew Jones

°C – Degrees Celsius
VOC – Volatile Organic Compound
LCS – Laboratory Control Sample
MSD – Matrix Spike Duplicate

Shaw Environmental, Inc. QA/QC Review
Groundwater – Second Semiannual (3Q 2008) Compliance Groundwater Monitoring Event
Lechner Brothers Recycling and Disposal Facility
CAS – Kelso, Washington, Report Numbers K0808955 and K0810187

Samples: LB-091608-1 (LB-1S), LB-091608-2 (LB-5S), LB-091608-8 (LB-5S Duplicate), LB-091608-3 (LB-6S), LB-091608-4 (LB-10S), LB-091608-5 (LB-13I), LB-091608-6 (LB-26I), LB-091608-7 (LB-27I), LB-091608-9 (Field Blank) and Trip Blank.

Sample Date: 09/16/2008

Laboratory Sample Received Date: 09/16/2008

Laboratory Data Received Date: 10/09/2008

QA/QC Review Date: 10/16/2008 (JMJ)

Laboratory Sample Receipt Information: Samples received in good condition at a temperature of 1.3 °C.

VOCs

Surrogates	All sample surrogate % recoveries within QC limits.
Trip Blank	All ND.
Method Blank	All ND, surrogate % recoveries within control limits.
LCS	All % recoveries within QC limits, and all surrogate % recoveries within QC limits.
Matrix Spike	All % recoveries within QC limits.
MSD	All RPDs within control limits.

The primary evaluation criterion was exceeded for dichlorodifluoromethane and trichlorofluoromethane in ICAL ID 7782. Additional details can be found in the case narrative.

Dissolved Metals

Method Blank	All ND.
LCS	All % recoveries within QC limits.
Duplicates	All RPDs within QC limits.
Matrix Spikes	All % recoveries within QC limits.

General Chemistry

Method blanks	All ND.
LCS	All % recoveries within QC limits.
Duplicates	All RPDs within QC limits.
Matrix Spikes	All % recoveries within QC limits.

Hold Times

All recommended analytical hold times were met, with the exception of the trip blank sample (a laboratory-prepared deionized water sample).

Reporting Limits

All established reporting limits were met.

Field QA/QC

Trip Blanks

A laboratory supplied trip blank was carried into the field with all the samples and returned to the laboratory for 8260 analysis. Because the trip blank was not listed on the chain of custody, the analysis was put on hold. The trip blank was requested to be analyzed on 10/16/08. All analytes were reported as non-detect.

Data Validation

Upon final review of lab report #K0808955, Shaw Environmental, Inc. finds the data to be valid for its intended use (11/16/08 JMJ).

Notes:

QA – Quality Assurance

QC – Quality Control

RPD – Relative Percent Difference

MS – Matrix Spike

JMJ – Jeremy Matthew Jones

°C – Degrees Celsius

VOC – Volatile Organic Compound

LCS – Laboratory Control Sample

MSD – Matrix Spike Duplicate